



# Maximize Potato Productivity



[www.lovelandproducts.com](http://www.lovelandproducts.com)

© 2015 Loveland Products, Inc. Always read and follow label directions.

In commercial potato production, water is the most important — and least predictable — variable. WaterMaxx2 helps you gain control of water movement issues, offering better moisture management throughout the production cycle for better potato quality and increased yield potential.

Below we take a look at some common water movement issues that affect potato production and how WaterMaxx2 works to correct them.

# Solving Water-Related Production Problems

## 1 Soil Water Repellency

Even low levels of water repellency can impede infiltration into the soil, causing water to sit on the surface. WaterMaxx2 helps water penetrate more quickly at the point of contact for better plant utilization and reduced loss to surface evaporation and runoff.

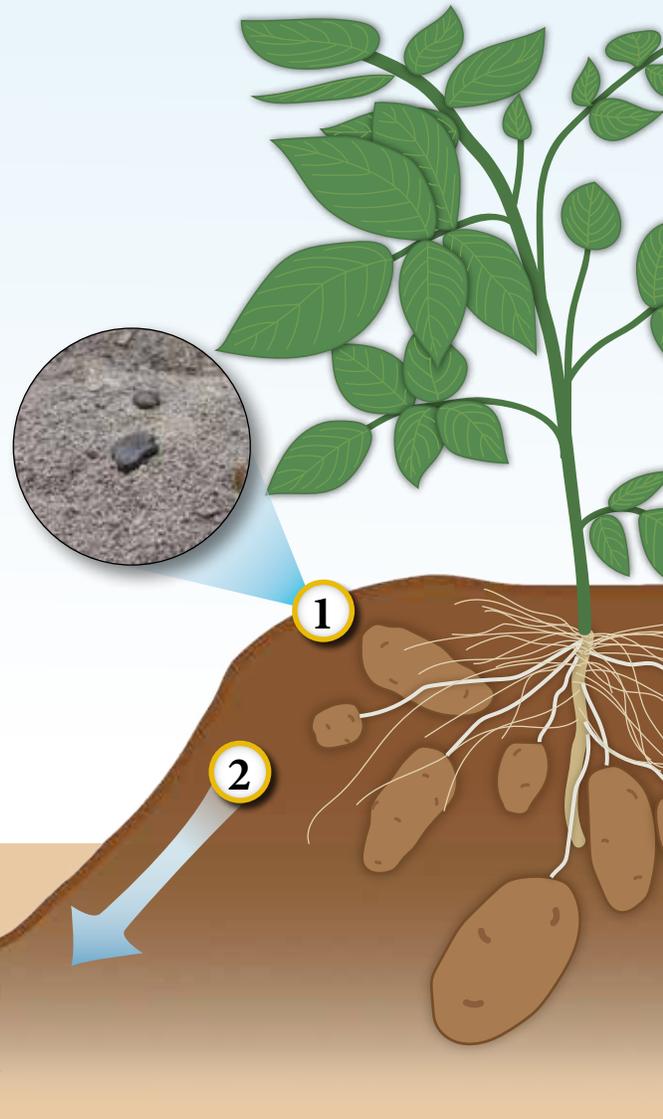
## 2 Hill Runoff and Erosion

While hilling promotes soil drainage, it can be counter-productive for soil hydration during a rain event or irrigation. If water doesn't enter into the soil quickly enough, gravity takes over and pulls water down the sides of the hill, eroding soil and taking nutrients and soil-applied inputs with it. By increasing the ease and speed of water penetration, WaterMaxx2 reduces the amount of water lost to runoff and helps keep soils intact.

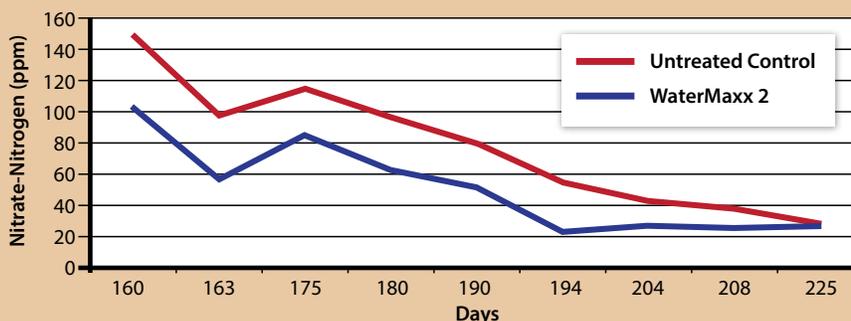
## 3 Nitrogen Leaching

Hilling, especially on sandy soils, increases the leaching potential of nitrates. WaterMaxx2 helps to reduce the potential for leaching in two ways.

First, WaterMaxx2 encourages applied water to move both vertically into the soil, as well as laterally through the soil. This helps spread nitrogen more diffusely in the soil profile, providing more uniform nitrogen coverage as well as protecting against leaching. It also increases water infiltration from the furrow, moving any nitrogen-laden water back into the hill soil where it belongs.



### WaterMaxx2 Reduces Nitrate-Nitrogen Leaching



A study conducted at the Hancock Agricultural Research Center in Hancock, WI showed that WaterMaxx2 significantly impacts nitrogen leaching rates when applied at emergence. In this study Urea (46-0-0) was applied at 120 lbs/acre on day 160, and nitrate-nitrogen leachate concentrations were sampled at varying intervals.



#### 4 Poor Moisture Distribution

Potatoes require adequate, consistent moisture for proper growth and tuber development. Disruptions in moisture availability can shorten the tuber bulking period and cause tuber defects, reducing both crop yield and quality. WaterMaxx2 ensures that moisture is distributed more evenly throughout the entire hill to optimize conditions for tuber production.



Sweet potatoes in Livingston, CA, irrigated via drip line. The untreated hill remains only partially wetted nearest to the drip line, while the hill treated with WaterMaxx2 exhibits more uniform moisture distributed throughout the center of the hill.

#### 5 Decreased Crop Yield and Inconsistent Quality

Inconsistent moisture through the growing season can translate into inconsistent tuber quality at harvest and a reduction in yield. WaterMaxx2 helps to manage moisture more consistently throughout the production cycle to ensure your crop reaches its highest yield potential. Studies have shown that WaterMaxx2 positively affects both tuber size and quantity, and reduces culls.



Treated with WaterMaxx2



Untreated

By reducing nitrogen leaching, WaterMaxx2 helps to retain more nitrogen in the soil profile for crop use. When crop nitrogen use was examined at the end of the trial, plants treated with WaterMaxx2 utilized 15% more nitrogen than the untreated control.



# The Bottom Line:

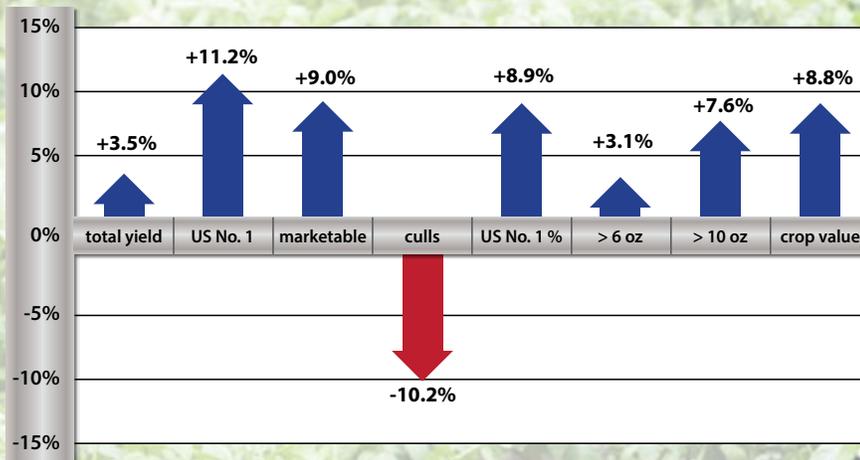
## What you put in vs. what you get out

It all comes down to good business — producing the highest quality product for the best profit.

In addition to being a good agronomic tool, WaterMaxx2 is also a good investment to protect your yield potential. Cumulative results collected from multiple trials in the US and abroad show that WaterMaxx2 positively affects a variety of crop yield parameters.

It's an affordable way to protect your yield potential. By helping your crop utilize water and fertilizer more efficiently, WaterMaxx2 helps you produce a better quality product with a higher market value.

### WaterMaxx2 Positively Affects Potato Yield Parameters



### Use Rates

WaterMaxx2 may be applied through any type of irrigation system (except permanent earthen ditches) or by conventional spray equipment. WaterMaxx2 may be applied as a one time application or in multiple applications throughout the growing season. Rates and frequency will be dependent on crop type and local growing conditions. Consult your sales representative for details.

### Choose the program that best meets your needs:

Apply 1 gallon (4 quarts)  
at emergence

Apply 2 quarts at emergence,  
plus two additional applications  
of 1 quart every 30 days

Apply 2 quarts at emergence,  
plus 2 quarts at canopy close

WaterMaxx is a registered trademark of Loveland Products, Inc  
Aquatrols is a registered trademark of Aquatrols Corporation of America.

Results may vary depending upon soil, climate and other conditions.



[www.lovelandproducts.com](http://www.lovelandproducts.com)

© 2015 Loveland Products, Inc. Always read and follow label directions.